

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

**LUCAS et al.**

Atty. Ref.: 2551-55

Serial No. **Unknown**

Group:

Filed: **February 8, 2001**

Examiner:

For: **TNF-DERIVED PEPTIDES FOR USE IN TREATING  
OEDEMA**

\* \* \* \* \*

**February 9, 2001**

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

**PRELIMINARY AMENDMENT**

Preliminarily amend the above-identified application as follows.

**IN THE SPECIFICATION**

Amend the specification as follows:

Insert the attached pages 4-8 for those which were originally filed.

Insert the attached Sequence Listing after the figures.

**IN THE CLAIMS**

Amend the claims as follows:

1. (Amended) A method of preparing a medicament for treating oedema comprising admixing a chain of 7 to 17 contiguous amino acids derived from the region of human TNF- $\alpha$  from Ser<sup>100</sup> to Glu<sup>116</sup> or from the region of mouse TNF- $\alpha$  from Ser<sup>99</sup> to Glu<sup>115</sup> with a pharmaceutically acceptable carrier.
2. (Amended) A method according to claim 1, wherein said peptide comprises a chain of 11 to 16 contiguous amino acids.

3. (Amended) A method according to claim 1, wherein said peptide comprises a chain of 13 to 15 contiguous amino acids.

4. (Amended) A method according to claim 1, wherein said peptide comprises a chain of 14 contiguous amino acids.

5. (Amended) A method according to claim 4, wherein said chain of 14 contiguous amino acids are chosen from the group consisting of the contiguous amino acid sequences

QRETPEGAEAKPWY and PKDTPEGAEELKPWY.

6. (Amended) A method according to claim 1, wherein said peptide is circularized.

7. (Amended) A method according to claim 6, wherein said peptide is circularized by replacing the NH<sub>2</sub>- and COOH-terminal amino acids by cysteine so that a disulfide bridge is formed between the latter cysteines.

8. (Amended) A method according to claim 7, wherein said circularized peptides are chosen from the group consisting of the circularized peptides  
CGQRETPEGAEAKPWYC and CGPKDTPEGAEELKPWYC.

9. (Amended) A method according to claim 1, wherein said oedema is

pulmonary oedema.

10. (Amended) A pharmaceutical composition for treating oedema comprising a chain of 7 to 17 contiguous amino acids derived from the region of human TNF- $\alpha$  from Ser<sup>100</sup> to Glu<sup>116</sup> or from the region of mouse TNF- $\alpha$  from Ser<sup>99</sup> to Glu<sup>115</sup> and a pharmaceutically acceptable carrier.

Add the following claims:

--11. (new) A composition according to claim 10, wherein said peptide comprises a chain of 11 to 16 contiguous amino acids.

12. (new) A composition according to claim 10, wherein said peptide comprises a chain of 13 to 15 contiguous amino acids.

13. (new) A composition according to claim 12, wherein said peptide comprises a chain of 14 contiguous amino acids.

14. (new) A composition according to claim 13, wherein said chain of 14 contiguous amino acids are chosen from the group consisting of the contiguous amino acid sequences

QRETPEGAEAKPWY and PKDTPEGAELKPWY.

15. (new) A composition according to claim 10, wherein said peptide is

circularized.

16. (new) A composition according to claim 15, wherein said peptide is circularized by replacing the NH<sub>2</sub>- and COOH-terminal amino acids by cysteine so that a disulfide bridge is formed between the latter cysteines.

17. (new) A composition according to claim 16, wherein said circularized peptides are chosen from the group consisting of the circularized peptides CGQRETPEGAEAKPWYC and CGPKDTPEGAELKPWYC.

18. (new) A composition according to claim 10, wherein said oedema is pulmonary oedema.

19. (new) A method of treating oedema comprising administering a composition of claim 10 to a person in need of said treatment.

20. (new) A method of inducing oedema resorption comprising administering a composition of claims 10 to a person suffering from oedema.--

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**REMARKS**

The claims have been amended to reduce improper multiple dependencies, without prejudice. Claims 11-20 find support throughout the specification. No new matter has been added. A marked-up copy of the amended claims is attached.

The specification has been amended to include amended pages 4-8 and the attached Sequence Listing. Amended pages 4-8 attached contain the sequence identifiers, consistent with the attached Sequence Listing. A marked up copy of pages 4-8 is also attached indicating where additions have been made. No new matter has been added.

The attached paper and computer readable copies of the Sequence Listing are the same. No new matter has been added.

An early and favorable Action on the merits is requested.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By:



**B. J. Sadoff**

Reg. No. 36,663

**BJS:Imy**

1100 North Glebe Road, 8th Floor  
Arlington, VA 22201-4714  
Telephone: (703) 816-4000  
Facsimile: (703) 816-4100

MARKED UP COPY OF AMENDED CLAIMS

1. (Amended) A method of preparing a medicament for treating oedema comprising admixing [Use of a peptide comprising] a chain of 7 to 17 contiguous amino acids derived from the region of human TNF- $\alpha$  from Ser<sup>100</sup> to Glu<sup>116</sup> or from the region of mouse TNF- $\alpha$  from Ser<sup>99</sup> to Glu<sup>115</sup> [for the manufacture of a medicament for treating oedema] with a pharmaceutically acceptable carrier.

2. (Amended) [Use of a peptide] A method according to claim 1, wherein said peptide comprises a chain of 11 to 16 contiguous amino acids.

3. (Amended) [Use of a peptide] A method according to claim 1, wherein said peptide comprises a chain of 13 to 15 contiguous amino acids.

4. (Amended) [Use of a peptide] A method according to claim 1, wherein said peptide comprises a chain of 14 contiguous amino acids.

5. (Amended) [Use of a peptide] A method according to claim 4, wherein said chain of 14 contiguous amino acids are chosen from the group consisting of the contiguous amino acid sequences

QRETPEGAEAKPWY and PKDTPEGAEELKPWY.

6. (Amended) [Use of a peptide] A method according to [any of claims 1 to 5]

claim 1, wherein said peptide is circularized.

7. (Amended) [Use of a peptide] A method according to claim 6, wherein said peptide is circularized by replacing the NH<sub>2</sub>- and COOH-terminal amino acids by cysteine so that a disulfide bridge is formed between the latter cysteines.

8. (Amended) A method [Use of a peptide] according to claim 7, wherein said circularized peptides are chosen from the group consisting of the circularized peptides CGQRETPEGAEAKPWYC and CGPKDTPEGAEELKPWYC.

9. (Amended) A method [Use of a peptide] according to [any of claims 1 to 8] claim 1, wherein said oedema is pulmonary oedema.

10. (Amended) A pharmaceutical composition for treating oedema comprising [a peptide according to any of claims 1 to 9] a chain of 7 to 17 contiguous amino acids derived from the region of human TNF- $\alpha$  from Ser<sup>100</sup> to Glu<sup>116</sup> or from the region of mouse TNF- $\alpha$  from Ser<sup>99</sup> to Glu<sup>115</sup> and a pharmaceutically acceptable carrier.